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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,289	01/22/2002	Yutaka Nakata	045237-0103	4765

22428 7590 04/30/2003

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WASHINGTON, DC 20007

EXAMINER

TSIDULKO, MARK

ART UNIT	PAPER NUMBER
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2875

DATE MAILED: 04/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/051,289

Applicant(s)

NAKATA, YUTAKA

Examiner

Mark Tsidulko

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2003.
- 2a) ☒ This action is **FINAL**.
- 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some * c) ☐ None of:
 - 1. ☒ Certified copies of the priority documents have been received.
 - 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 - a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

The submission of the amendment filed on 2/6/2003 is acknowledged. At this point claims 2-8 have been amended and new claims 9-15 have been added. Thus, claims 1-15 are at issue in the instant application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims **1-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over Strobel et al. (U.S. 5,204,820) in view of Bertling et al. (U.S. 5,440,456).

Referring to Claims **1, 3, 4** Strobel et al. disclose (Fig.1) a lamp device for vehicle having a light source [3], a reflector [1] in which a reflection surface is Bezier (or B-spline) surface (Abstract). Strobel et al. also disclose that a reflected light irradiates to an external section in accordance with a target light distribution pattern (Abstract, lines 3-6).

Strobel et al. disclose the instant claimed inventions except for: a lens having no prism and formed in a recess shape in a vertical and horizontal cross sections.

Bertling et al. disclose a lens [28] having no prism and formed in a recess shape in a vertical and horizontal cross sections. Since vertical and horizontal cross sections of the lens are formed in the recess shape, the light is largely refracted by the lens. As result, it is possible to

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construct the headlamp having small light generation and large illumination intensity distribution..

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the lens of Bertling et al. for the lamp device of Strobel et al. in order to use a small light generation and obtain a large illumination intensity distribution for the headlight.

Referring to Claim 2 Strobel et al. disclose the instant claimed inventions except for: reflector surface of the reflector is structured such that the vertical cross section and horizontal cross section are formed in a oval surface larger than the lens.

Bertling et al. disclose (Fig.1) a lamp device wherein the reflection surface of reflector is structured such that the vertical cross section and the horizontal cross section formed in a substantially oval surface larger then curved surface of the lens.

This structure allows the light concentrate on a point close to the optical axis and obtain the light flux with bigger density. The result is improved visibility of a road surface ahead of the vehicle.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the structure of Bertling et al. for device of Strobel et al. for purpose of transmitting reflected light to an external section with a desired light distribution.

Referring to claims **5-12** Bertling et al. disclose a lens but does not disclose a free curved surface formed on a front surface of the lens. Free curved surface is well known in the art of illumination. Free curved surface is a surface which cannot be strictly described by the analytical expression and used for obtaining the light with a target distribution pattern. It is understood that the free curved surface may be provided on any surface of the lens (front, back or both) depending on necessity.

Referring to claims **13, 14** it is understood that any desired type of the lens well known in the art such as biconcave (having recess on front and back sides) or concave-convex (having recess-shaped first surface and convex-shaped second surface) may be used depending on necessity.

Referring to Claim **15** it is understood that any surface of the lens may be disposed facing the reflector.

Response to Arguments

Applicant's arguments filed on 2/6/03 have been fully considered but they are not persuasive.

Applicant argue that the combination of Strobel's reflector and Bertling's lens would not produce the desired optical pattern, as the Bertling's lens does not have a focal point.

In response, it well known that any lens having curved surfaces has a focal point. Even lens having two flat parallel surfaces theoretically has a focal point in the infinity.

Applicant argue that Bertling does not show a reflector surface is larger than the lens.

In response, it is clearly visible of Fig.1 of Bertling that the reflector [10] has reflecting surface which is larger than the recessed surface [28] of the lens [24].

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Tsidulko whose telephone number is (703)308-1326. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (703) 305-4939. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and

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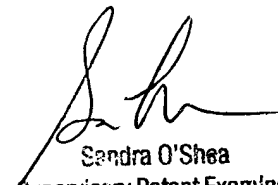
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(703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

M.T.

April 24, 2003



Sandra O'Shea
Supervisory Patent Examiner
Technology Center 2800